



MANAGING HAZARDS IN INACTIVE FACILITIES

D. W. Freeman

Westinghouse Savannah River Company



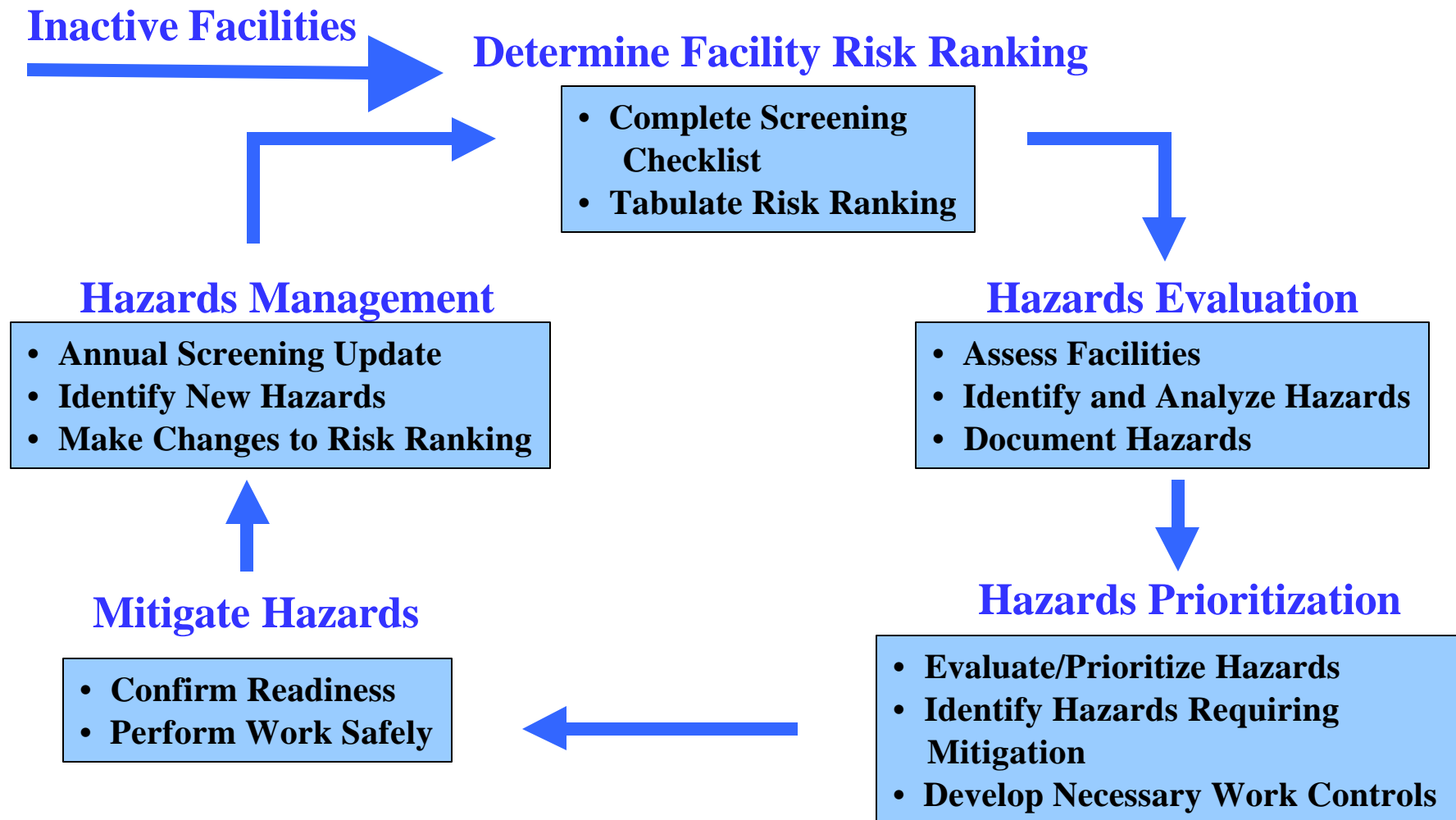
• **Many Facilities**

• **Many Hazards**

• **Finite Budget**

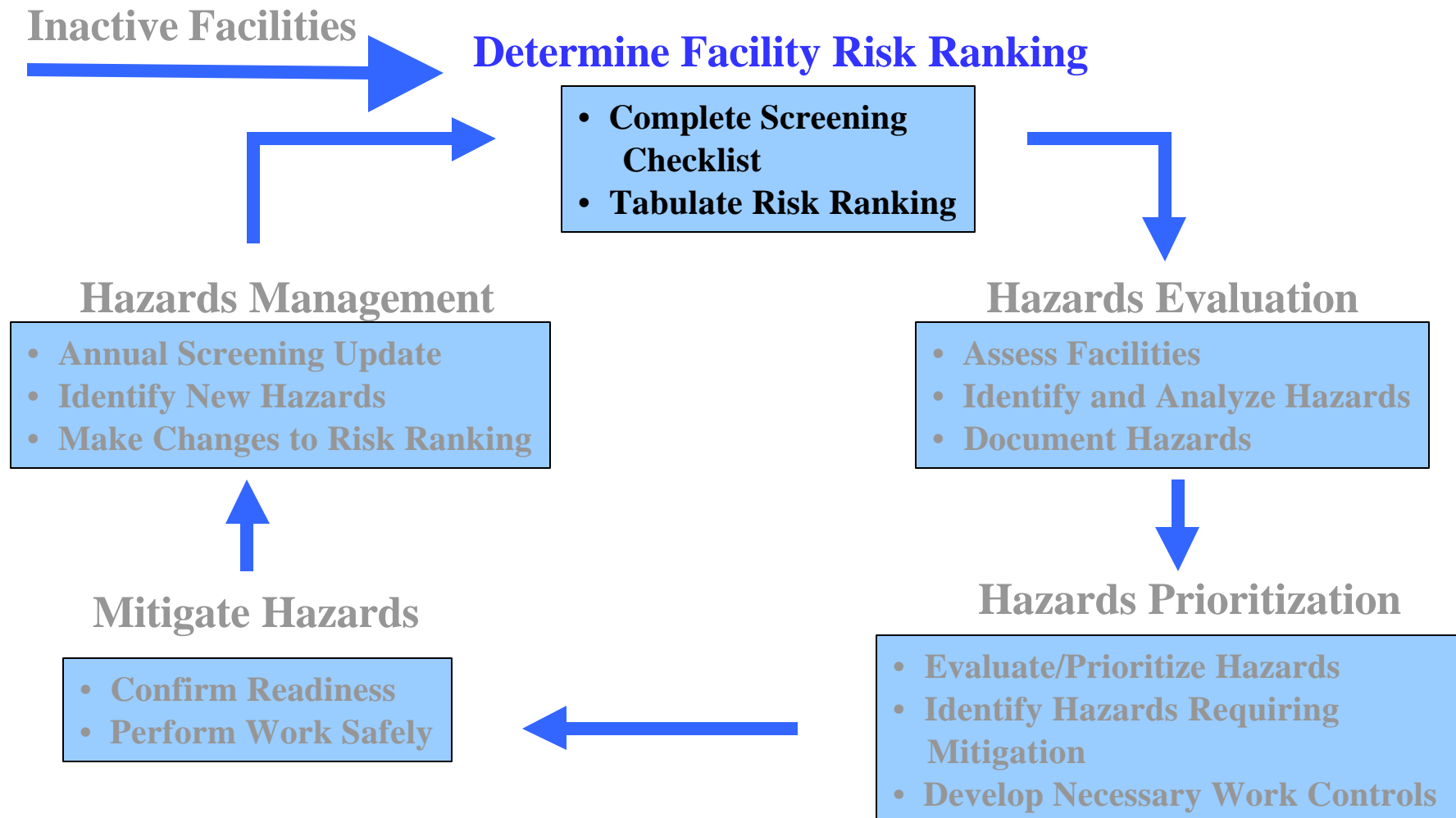


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FACILITY RISK RANKING

- **Facility Hazard Screening Reviews Conducted**
 - ❖ **Identifies facilities with worst hazards**
 - ❖ **Reviews performed by cognizant facility personnel**
 - ❖ **Simplified checklist approach**
 - ❖ **Output is risk-ranked prioritization listing**

FY99 FACILITY REVIEW CHECKLIST

Facility #: _____ Facility Name: _____
 Area _____ Structure Number _____ Structure name _____
 Structure Class _____ Structure Type _____ Lifecycle _____
 Division: _____ Department _____ Facility Custodian: _____
 Facility Reviewer (print name) _____ Review date _____ Revision date _____
 Facility Council POC _____ Structure_ID _____ Risk ranking score _____

<p><u>Worker Occupancy</u></p> <p>Building occupied or routinely entered <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A (if entered state frequency as a comment)</p> <p>Is the structure located within 100 feet of an occupied building or area <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Are entry controls maintained <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Building/Structure Integrity</u></p> <p>Do hazards exist at building entry points <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Structural damage to walls roofs & stairs <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Signs of water/animal intrusion, roof leaks or groundwater entry <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Building Systems are Functional</u></p> <p>Utilities functional (electricity, HVAC, steam, lighting) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Fire protection operational (sprinklers, fire alarms, extinguishers) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Communications available (phone) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Public Address system operational <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Routine waste handling/disposal (no waste accumulation) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>General Industrial Safety (hazards present)</u></p> <p>Tripping, falling, slipping <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Striking / being struck (overhead hazards, clearances, ...etc.) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Drowning, suffocation, confined spaces <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Electrocution & shock potential (high voltage, transformers, open boxes,...) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Noise & hearing protection required <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Personnel Exposure to Hazards</u></p> <p>Biological (animals, rodents, insects, ...) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Biological (mold, fungus, poor air quality) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Radiological contamination (internal uptake & external exposure) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Hazardous materials - non-rad (asbestos, mercury, cadmium) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Hazardous chemicals <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Chemicals present not in SARA II Inventory (if yes, list type and quantity) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Chemicals stored in degrading containers <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p>	<p><u>Environmental Release</u></p> <p>Potential radiological release (air, ground, ground water) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Potential chemical spill (releases to air, ground, ground water) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Existing remediation programs in place <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p>Potential hazardous material (asbestos, PCB, etc..) <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Process Systems</u></p> <p>Residual process material in tanks/ piping. If yes, list material types/locations below. <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Surveillance & Maintenance (S&M) Program</u></p> <p>Estimated S&M (Check only one, annual S&M costs less than) <input type="radio"/> \$100k <input type="radio"/> \$500k <input type="radio"/> \$1M <input type="radio"/> \$10M <input type="radio"/> \$50M</p> <p>Status of S&M Plan (Check One) <input type="radio"/> in place now <input type="radio"/> being developed <input type="radio"/> no defined plan <input type="radio"/> N/A</p> <p>Status of Safety Basis (Check One) <input type="radio"/> in place now <input type="radio"/> in place, not current <input type="radio"/> not defined <input type="radio"/> N/A</p> <p><u>Hazardous Energy Review</u></p> <p>Electric Power <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Steam <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Compressed Air <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Compressed Gases <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Residual Chemicals <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Explosive Residues <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p>Hi/Lo Pressure Water <input type="radio"/> Isolated <input type="radio"/> Controlled <input type="radio"/> Unknown</p> <p><u>Is immediate corrective action required? (If yes, contact facility custodian)</u> <input type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A</p> <p><u>Comments/Concerns:</u></p> <div style="border: 1px solid black; height: 150px; margin-top: 5px;"></div>
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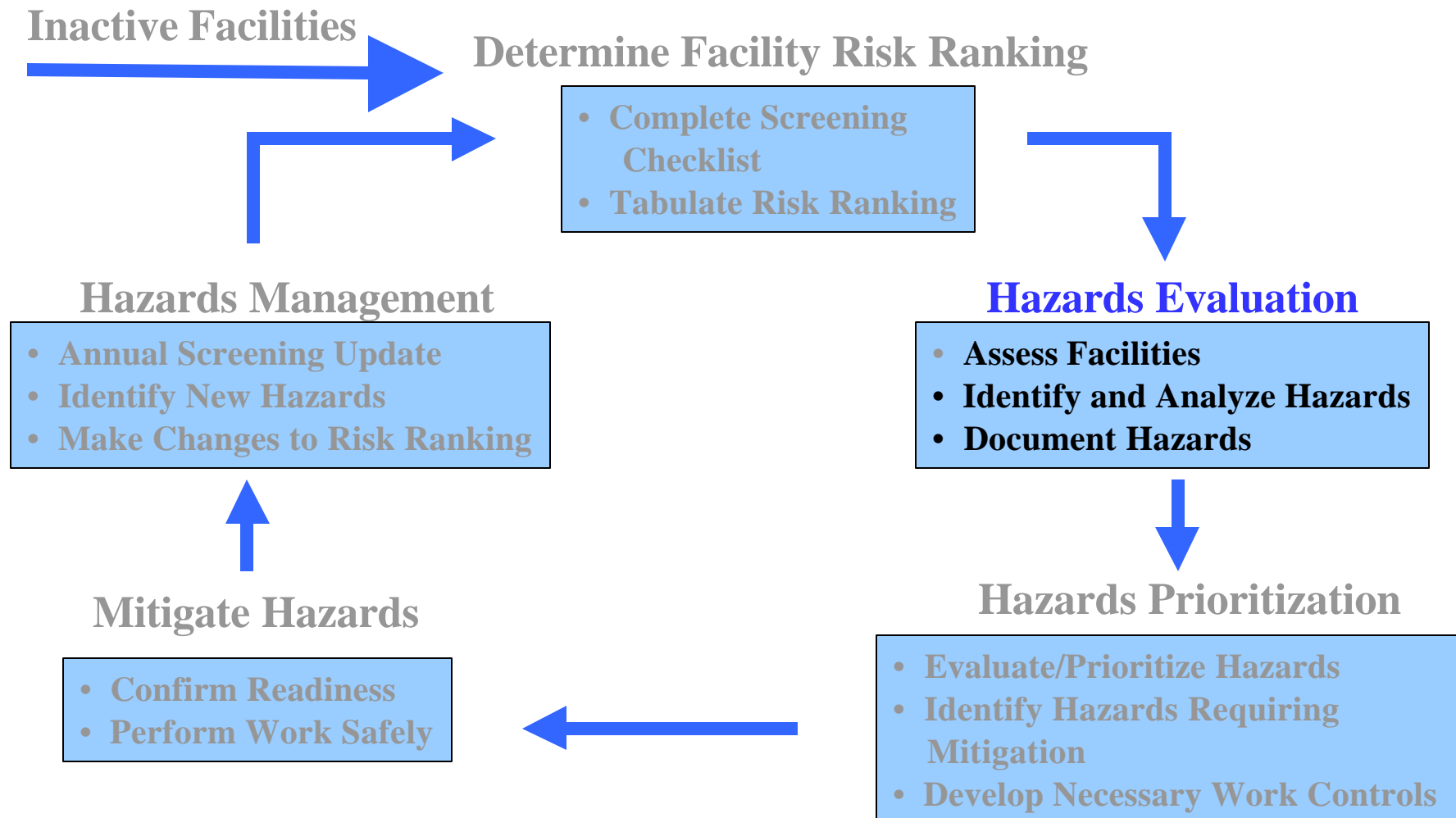
FACILITY RISK RANKING

- **Systematic Facility Risk Rating and Prioritization Ranking Algorithm Using Field Review Results**

- **Field Review Evaluated Facility Conditions:**
 - ❖ **Structural integrity**
 - ❖ **Worker occupancy**
 - ❖ **Industrial safety**
 - ❖ **Radiological hazards**
 - ❖ **Hazardous materials**
 - ❖ **Environmental releases**
 - ❖ **Administrative controls/safety basis**
 - ❖ **Ongoing surveillance & maintenance efforts**



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HAZARDS EVALUATION

- **Facilities Reviewed in “Risk Ranked” Priority Order**
- **Detailed Facility Evaluation**
 - ❖ **Field walkdowns**
 - ❖ **Documentation reviews**
 - ❖ **Interviews**
- **Hazards Identified**
- **Hazards Formally Documented**



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HAZARDS PRIORITIZATION

- **Hazards Evaluated**
 - ❖ **Use DOE-ES&H Risk-Based Prioritization Model (RPM)**
- **Multi-Disciplined Team Review**
- **Hazards Assigned a Numerical Risk Score**
- **Hazards Prioritized**
- **Workscope Determined**

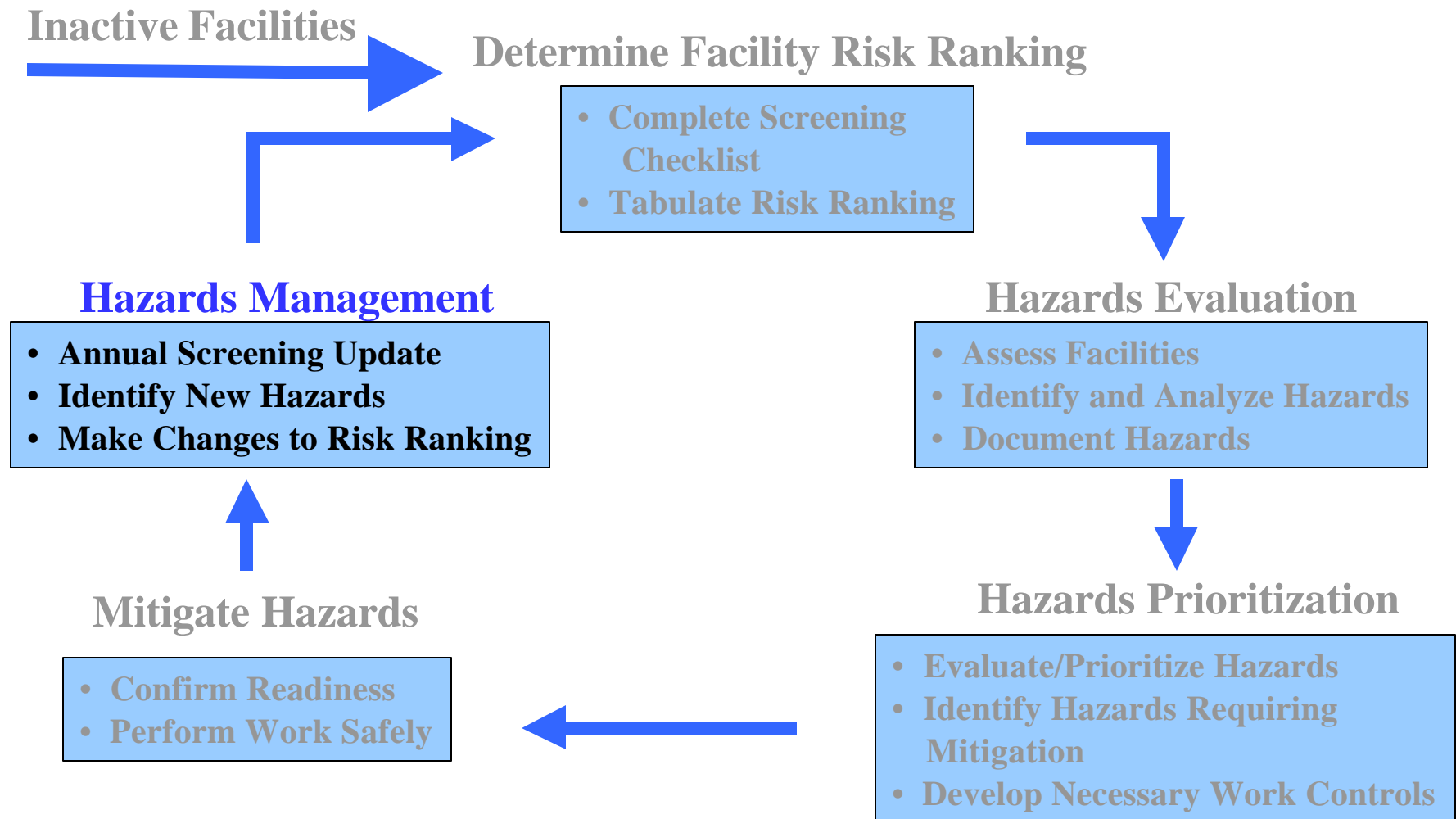


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HAZARDS MANAGEMENT

- **Facility Hazard Screening Reviews
Updated Annually**
- **Any Newly Identified Hazards
Evaluated**
- **Hazards Status/Risk Ranking
Updated**



SUMMARY

- **Systematic Methodology For Managing Facility Hazards**
- **Hazards Identified**
- **Consistency in Hazards Evaluation**
- **Dynamic Process With Ongoing Feedback**
- **Hazards Are Actively Being Removed**
- **Risks Are Minimized**
 - ❖ **Facility workers**
 - ❖ **Environment**
 - ❖ **Public**